

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An electromagnet core capable of accommodating ~~made of a soft magnetic material and including~~ a coil, ~~wherein the electromagnet core comprising:~~ is formed with

a soft magnetic powder; and

a binder for the soft magnetic powder, ~~and the binder is made of a polyimide resin.~~

Claim 2 (currently amended): The electromagnet core according to claim 1, wherein a volume ratio of the polyimide resin to the soft magnetic powder is in a range of from 0.05 wt% to 1.0 wt%.

Claim 3 (currently amended): ~~The electromagnet core according to Claim 1 or 2, wherein the electromagnet core is used for a~~ A measuring valve control electromagnet used for a liquid fuel injector, wherein the measuring valve control electromagnet comprises the electromagnet core according to claim 1.

Claim 4 (currently amended): A method of manufacturing an electromagnet core comprising the steps of accommodating ~~made of a soft magnetic material and including~~ a coil, the method comprising steps of:

forming a lubricant layer on a receiving portion of a surface of a frame of a molding die;

Claim 9 (new): The method according to claim 8, the method further comprising the step of adding a flow initiating material to the mixture.

Claim 10 (new): The electromagnet core according to claim 1, wherein grains of the soft magnetic powder are coated with an insulating film.

Claim 11 (new): The electromagnet core according to claim 1, wherein the soft magnetic powder is made of electromagnetic soft iron or silicon steel.

Claim 12 (new): The electromagnet core according to claim 1, wherein grain size of the soft magnetic powder is in a range of from 10 μm to 200 μm .

Claim 13 (new): The electromagnet core according to claim 1, wherein grain size of the soft magnetic powder is in a range of from 10 μm to 100 μm .

Claim 14 (new): The electromagnet core according to claim 1, wherein the polyimide resin is made of wholly aromatic polyimide, bismaleide polyimide, or additive-type polyimide.

Claim 15 (new): The electromagnet core according to claim 1, wherein a ratio of the polyimide resin to the soft magnetic powder is in a range of from 0.1 wt% to 0.5 wt%.

Claim 16 (new): The method according to claim 8, wherein the aqueous solution containing the lubricant is an aqueous solution of sodium benzoate or an aqueous solution of potassium dihydrogen phosphate.

Claim 17 (new): The method according to claim 9, wherein the flow initiating material is ethylene bis-stearamide, ethylene bis-laurylamide, or methylene bis-stearamide, or a mixture thereof.

Claim 18 (new): The method according to claim 9, wherein the flow initiating material is a material formed by adding:

30% or less lithium stearate or 12-hydroxy lithium stearate; to

ethylene bis-stearamide, ethylene bis-laurylamide, or methylene bis-stearamide, or a mixture thereof.

Claim 19 (new): The method according to claim 9, wherein the amount of the flow initiating material added to the mixture is in a range of from 0.002 wt% to 0.1 wt%.

Claim 20 (new): The method according to claim 9, wherein grain size of the flow initiating material is in a range of from 1 μm to 20 μm .